

### ***Listing of the Claims***

This listing of claims will replace all prior versions, and listings of claims in the application.

1. (Currently amended) A method for producing an automatically pH-adjusting eukaryotic dry powdered culture medium, comprising:

(a) determining the ratio of pH-opposing forms of buffer salts required to be added to ~~said powder~~ a eukaryotic dry powdered culture medium to automatically provide a desired final pH upon reconstitution of said ~~powder~~ dry powdered culture medium with a solvent; and

(b) adding amounts of pH-opposing forms of buffer salts to said ~~powder~~ dry powdered culture medium in the ratio determined in step (a);

to produce an automatically pH-adjusting eukaryotic dry powdered culture medium having said desired final pH upon reconstitution.

2. (Previously presented) The method of claim 1, further comprising packaging said dry powdered culture medium.

3. (Previously presented) The method of claim 1, further comprising sterilizing said dry powdered culture medium.

4. (Previously presented) The method of claim 3, wherein said sterilization is accomplished by irradiating said dry powdered culture medium with gamma rays until said medium is sterile.

5. (Previously presented) The method of any one of claims 1-3, wherein said medium comprises at least one buffering salt selected from the group consisting of a monobasic buffering salt and a dibasic buffering salt.

6. (Previously presented) The method of claim 5, wherein said monobasic buffering salt is a monobasic phosphate salt and said dibasic buffering salt is a dibasic phosphate salt.

7. (Previously presented) The method of claim 6, wherein said monobasic phosphate salt is a monobasic sodium phosphate salt and said dibasic phosphate salt is a dibasic sodium phosphate salt.

8. (Original) The method of claim 6, wherein at least one of said monobasic or dibasic phosphate salts is a potassium phosphate salt.

9. (Previously presented) The method of claim 1, wherein said dry powder culture medium contains sodium bicarbonate but does not liberate CO<sub>2</sub> upon storage.

10. (Currently amended) An automatically pH-adjusting eukaryotic dry powdered culture medium produced by the method of any one of claims 1, 2, 3 or 9.

11 - 14. (Cancelled)

15. (Currently amended) A method of cultivating a eukaryotic cell comprising preparing an automatically pH-adjusting eukaryotic dry powdered culture medium prepared according to the method of any one of claims 1, 2, 3 or 9, reconstituting the medium with at least one solvent to form a eukaryotic culture medium solution, and contacting a eukaryotic cell with said solution under conditions favoring cultivation of the cell.

16. (Currently amended) A method of cultivating a eukaryotic cell, comprising reconstituting the culture medium of claim 10 with a solvent to form a eukaryotic culture medium solution, and contacting the cell with said solution under conditions favoring the cultivation of the cell.

17. (Cancelled)

18 - 21. (Cancelled)

22. (Currently amended) The method of claim ~~20~~ 16, wherein said eukaryotic cell is a yeast cell, a plant cell, or a cell line derived therefrom.

23. (Currently amended) The method of claim ~~24~~ 15, wherein said eukaryotic cell is a yeast cell, a plant cell, or a cell line derived therefrom.

24. (Currently amended) The method of claim ~~20~~ 16, wherein said eukaryotic cell is an animal cell or a cell line derived therefrom.

25. (Currently amended) The method of claim ~~24~~ 15, wherein said eukaryotic cell is an animal cell or a cell line derived therefrom.

26. (Previously presented) The method of claim 24, wherein said animal cell is a mammalian cell or a cell line derived therefrom.

27. (Original) The method of claim 26, wherein said mammalian cell is a human cell or a cell line derived therefrom.

28. (Currently amended) A kit for culturing a eukaryotic cell, comprising one or more containers containing an automatically pH-adjusting eukaryotic dry powdered culture medium prepared according to the method of any one of claims 1, 2, 3 or 9.

29. (Currently amended) A kit for culturing a eukaryotic cell, comprising one or more containers containing the automatically pH-adjusting eukaryotic dry powdered culture medium of claim 10.

30. (Cancelled)

31. (Original) The kit of claim 28, wherein said kit further comprises one or more additional containers containing at least one additional component selected from the group consisting of at least one growth factor, at least one culture medium supplement, at least one animal tissue extract, at least one animal organ extract, at least one animal gland extract, at least one enzyme, at least one protein, at least one vitamin, at least one cytokine, at least one lipid, at least one trace element, at least one extracellular matrix component, at least one buffer, at least one antibiotic, and at least one viral inhibitor.

32. (Previously presented) The kit of claim 29, wherein said kit further comprises one or more additional containers containing at least one additional component selected from the group consisting of at least one growth factor, at least one culture medium supplement, at least one animal tissue extract, at least one animal organ extract, at least one animal gland extract, at least one enzyme, at least one protein, at least one vitamin, at least one cytokine, at least one lipid, at least one trace element, at least one extracellular matrix component, at least one buffer, at least one antibiotic, and at least one viral inhibitor.

33. (Original) A composition comprising the automatically pH-adjusting culture medium of claim 10 and at least one cell.

34. (Original) The composition of claim 33, wherein said composition is a powder.

35. (Cancelled)

36. (Currently amended) The composition of claim 33, wherein said cell is selected from the group consisting of ~~a bacterial cell~~, a yeast cell, a plant cell and an animal cell.

37. (Original) The composition of claim 36, wherein said animal cell is a mammalian cell.

38. (Original) The composition of claim 37, wherein said mammalian cell is a human cell.

39. (Original) The composition of claim 36, wherein said cell is an established or transformed cell line.

40. (Previously presented) The method of claim 15, wherein said solvent comprises at least one solvent selected from the group consisting of water, serum and an organic solvent.

41. (Previously presented) The method of claim 40, wherein said water is distilled or deionized water.

42. (Previously presented) The method of claim 40, wherein said serum is bovine serum, human serum or fetal bovine serum.

43. (Previously presented) The method of claim 40, wherein said organic solvent is dimethylsulfoxide, acetone or ethanol.

44. (Previously presented) The method of claim 25, wherein said animal cell is a mammalian cell or a cell line derived therefrom.